

Welcome!!!

H. Leslie Grebe

Centering

- * Pick up:
 - 2 slips of paper
(1 for now, 1 for later)

Opening question (1st slip of paper)

What is one thing you find confusing about this temperature and heat stuff?

Sep 7-7:04 AM

Game! True or False...

Yellow => True

Numbered Heads Together

Blue => FALSE

- * Make groups of 3
 - make sure you know everyone's name
 - tell each other what sport you like best (play or watch)
- * Figure out who is #1, #2, #3
- * Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"
- * Leslie pulls a number and that person will give the group's answer.

Jan 4-7:01 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

1. Common ice can be colder than 0°C .

Why do you say that?

SOLIDS CAN BE DIFFERENT TEMPS
 0°C IS JUST THE DIVIDING LINE

Jan 4-7:20 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

2. Molecules move ~~faster~~ ^{slower} when the temperature is lower.

Why do you say that?

BLUE DOT SIMULATION - THEY MOVE
FASTER WHEN YOU ADD HEAT

Jan 4-7:20 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

3. There are exactly 2 scales to measure the temperature of something.

Why do you say that?

WE USE K, °C, °F
OR MAKE YOUR OWN

Jan 4-7:20 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

4. In Celsius, zero means no molecule motion.

Why do you say that?

Ø K MEANS NO MOLECULE MOTION
0°C IS JUST WATER FREEZING

Jan 4-7:20 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

5. When 2 substances of different temperatures are in thermal contact, heat flows (transfers) from the higher temperature substance to the lower temperature substance.

Why do you say that?

HOT OBJECT MOLECULES BUMP INTO SLOWER MOLECULES & TRANSFER ENERGY

Jan 4-7:20 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

6. A temperature change of 1°C is a bigger change than 1°F .

Why do you say that?

CELSIUS BREAKS INTO BIGGER "STEPS" =>
BIGGER CHANGE
=> SMALLER # FOR SAME CHANGE

Jan 4-7:20 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

7. A cup of hot coffee has a greater total internal energy than an iceberg.

FASTER
☉ 370K

SLOWER

270K

Why do you say that?

MORE MOLECULES

FEWER
MOLECULES

WINS OUT OVER

COFFEE'S HIGHER AVERAGE

MORE
MOLECULES

Jan 4-7:20 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

8. Water freezes at 36°.

Why do you say that?

Jan 4-7:20 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

9. All parts of my desk chair are at room temperature.

Why do you say that?

Jan 4-7:20 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

10. All temperatures in °C are lower than the corresponding temperature in °F.

Why do you say that?

Jan 4-7:20 AM

NHT:

* Work together to figure out a **group** answer to the T/F question plus "**Why do you say that?**"

* Leslie pulls a number and that person will give the group's answer.

Yellow => True

Blue => FALSE

True or False:

11. 273K is the boiling point of water.

Why do you say that?

Jan 4-7:20 AM

RUN to GIG

Challenge:

Word challenge:

OR

Number Challenge:

Make FIRE produce HEAT

- * Fahrenheit and Celsius have a linear relationship.
- * We know 2 points on that line (freezing and boiling points)
- * Find the $y = mx + b$ formula that relates the two...

Dec 22-7:38 AM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

Your can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

TRUE OR FALSE

1. Common ice can be colder than 0°C .

T

2. Molecules move faster when the temperature is lower.

F

3. There are exactly 2 scales to measure the temperature of something.

F

Jan 3-7:48 AM